

REMARKS

Entry of the foregoing and reconsideration of the application identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.114 and in light of the remarks which follow, are respectfully requested.

At the outset, Applicants and Applicants' representative sincerely thank Examiner Sergeant of the U.S. Patent and Trademark Office for participating in discussions with Applicants' representative concerning the present application on August 18, 2009. In an effort to expedite prosecution of the present application, and in view of the discussions, the claims have been amended in the manner set forth above. Reconsideration and withdrawal of the outstanding rejections are respectfully requested for at least the following reasons.

By the above amendments, claims 7 and 8 have been canceled without prejudice or disclaimer. Claims 1 and 18 have been amended to recite mixing polycaprolactone diol with a difunctional isocyanate in the presence of a water-miscible solvent having no reactive hydrogen to form a first mixture consisting of the polycaprolactone diol, the difunctional isocyanate and the water-miscible solvent. Support for such amendments can be found in the instant specification at least in the examples set forth at pages 7-8, taken in connection with page 2, line 25 to page 3, line 10. Claims 1 and 18 have also been amended to delete the phrase "having a shape memory function." Claims 1 and 18 have further been amended for clarification purposes to recite heating the first mixture "to form a heated mixture." Claim 10 has been amended in a manner consistent with the above amendment to claim 1. Entry of the foregoing amendments is proper at least because a Request for Continued Examination is being filed herewith. See 37 C.F.R. §1.114.

In the Official Action, claims 1-3, 7-12, 16-20 and 23 stand rejected under 35 U.S.C. §112, first and second paragraphs, for reciting the phrase "shape memory function." Without addressing the propriety of these rejections, it is noted that such rejections are moot in view of the above amendments, in which the phrase "shape memory function" has been deleted from claims 1 and 18. Accordingly, the §112 rejections are moot, and withdrawal of such rejections is respectfully requested.

Claims 1-3, 7-12, 16-20 and 23 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,239,213 (*Ramanathan et al*). Withdrawal of this rejection is respectfully requested for at least the following reasons.

According to exemplary aspects, independent claim 1 is directed to a process for manufacturing a polyurethane, and independent claim 18 is directed to a polyurethane manufactured by a particular process.

Ramanathan et al relates to a process for the preparation of aqueous polyurethane dispersions by reacting a polyester polyol. See col. 1, lines 6-9.

It is well established that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). For an anticipation to exist, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

In the present case, *Ramanathan et al* does not disclose mixing polycaprolactone diol with a difunctional isocyanate in the presence of a water-miscible solvent having no reactive hydrogen to form a first mixture consisting of the polycaprolactone diol, the difunctional isocyanate and the water-miscible solvent, as

recited in claims 1 and 18. In this regard, the recited first mixture that is formed by the mixing step a), and subjected to the heating step b), consists of the polycaprolactone diol, the difunctional isocyanate and the water-miscible solvent. That is, polyols which differ from polycaprolactone diol are excluded from the recited first mixture.

Ramanathan et al does not disclose such claimed subject matter.

By comparison, *Ramanathan et al* discloses preparing a solution of a polyol in an organic solvent. See col. 2, lines 45-49. Concerning the polyol employed in the process, *Ramanathan et al* discloses a list of branched polyester polyols at col. 4, lines 15-42. *Ramanathan et al* further discloses the optional use of the polyols listed at column 4, lines 46-60. *Ramanathan et al* teaches that such optional polyols are employed in combination with the branched polyester polyol. Quite clearly, *Ramanathan et al* simply has no disclosure of the formation and heating of a first mixture consisting of the polycaprolactone diol, the difunctional isocyanate and the water-miscible solvent.

Furthermore, *Ramanathan et al* does not disclose the polyurethane product recited in claim 18. As noted above, *Ramanathan et al* fails to disclose the use of a first mixture consisting of the polycaprolactone diol, the difunctional isocyanate and the water-miscible solvent. In view of such deficiency, *Ramanathan et al* also fails to disclose the polyurethane product formed from such first mixture.

For at least the above reasons, it is apparent that *Ramanathan et al* fails to constitute an anticipation of the currently pending claims. Accordingly, withdrawal of the §102(b) rejection is respectfully requested.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: August 27, 2009

By: 

Roger H. Lee

Registration No. 46317

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620